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BUCKINGHAM, DOOLITTLE & BURROUGHS, LLP			MACARTHUR, VICTOR L	
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Please find below and/or attached an Office communication concerning this application or proceeding.



### **DETAILED ACTION**

Claims 39-45 remain withdrawn from further consideration by the examiner as being drawn to a non-elected invention.

#### ***Claim Objections***

Claim 6 is objected to because of the following informalities:

- The phrase “the gap defined in the wall” (line 1 of claim 6) lacks proper antecedent basis and should be replaced with --the gap disposed in the base wall-- for consistent claim terminology.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-29 rejected under 35 U.S.C. 102(b) as being anticipated by Kleuver (U.S. Patent 4,477,109).

Claim 13. Keuver discloses (figs.1-3) a connecting fastener, comprising a hollow cylindrical body (16), which includes: a base (45) that includes a first end (top end of 45) a second end (bottom end of 45) and defines a first central bore (portion of 20 within 45); at least

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one projection (49), extending from an inner surface of the base into the first central bore proximate the first end of the base; a cylindrical collar (14) that includes a first end (top end of 14) disposed proximate the second end of the base and defines a second central bore (portion of 20 within 14); and a shoulder (40) connected to and extending between the second end of the base and the first end of the collar along at least a portion of the circumferences of the base and the collar; and an aperture (portion of 20 extending through 16 and 14) defined in the cylindrical body, extending about a portion of the body from an area near the first end of the base and through the collar, wherein the width of the aperture at the base of the body is greater than the width of the aperture at the collar.

Claim 14. Keuver discloses that the outer diameter of the collar is less than the outer diameter of the base.

Claim 15. Keuver discloses that the at least one projection extending from an inner surface of the base includes at least two projections (49).

Claim 16. Keuver discloses that the at least two projections are opposed about the diameter of the bore of the base.

Claim 17. Keuver discloses that the at least one projection includes at least one of a ramp surface (surface receiving 55), a stopping wall (54), a retaining wall (inner face of 49) and a locking surface (surface of 54).

Claim 18. Keuver discloses that the width of the aperture defined in the cylindrical body at the base is sufficient to allow a sealing surface on a tube to pass through, and at the collar is narrower than the width of the shoulder of the sealing surface.

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Claim 19. Keuver discloses a pair of opposing wings, wherein each wing projects from the outer surface of the collar and extends (for some distance) parallel to the longitudinal axis of the collar along the length of the collar.

Claim 20. Keuver discloses (figs.1-3) a fastening connection, comprising: a connector member, including: a cylindrical base (45) that includes a first end (top end of 45), a second end (bottom end of 45) and a wall (wall of 45), and defines an aperture (portion of 20 within 45) in the wall and a central bore (portion of 20 within 45 40 and 14); at least two uniformly spaced projections (49), extending from an inner surface of the wall into the central bore proximate the first end of the base; a cylindrical collar (14) that includes a wall (wall of 14) and a first end (top end of 14) disposed proximate the second end of the base, defines a central bore (bore within 14) and defines a gap in the wall (gaps between ribs, col.3, ll.43-44); and a shoulder (40) connected to and extending between the second end of the base and the first end of the collar along at least a portion of the respective circumferences of the base and the collar; and a receiving member (15), including: a cylindrical body (cylindrical body of 15) that includes a first end (top end of 15), a second end (bottom end of 15) and an outer diameter that is less than the distance between the at least two uniformly spaced projections on the base of the connector member across the central bore of the connector member (as seen in fig.8); means (48) to secure at least a portion of the body of the receiving member to the connector member.

Claim 21. Keuver discloses that the means to secure at least a portion of the body of the receiving member to the connector member include at least two opposing tabs (48) projecting from the outer surface of the cylindrical body near the first end of the body.

Claim 22. Keuver discloses that there are two uniformly spaced projections on the receiving member and each projection includes a locking surface (55) that engages a corresponding tab (tab portion of 49) of the receiving member.

Claim 23. Keuver discloses that the securing of the receiving member to the connector member is effectuated with a turn of the connector member that is **approximately** (though not necessarily exactly) one-quarter of the circumference of the outer circumference of the base of the connector member (emphasis added).

Claim 24. Keuver discloses that the outer diameter of the wall of the collar is less than the outer diameter of the wall of the base.

Claim 25. Keuver discloses that the projections are opposed about the central bore of the cylindrical base.

Claim 26. Keuver discloses that the width of the aperture in the wall of the cylindrical base is sufficient to allow a sealing surface on a tube to pass through the aperture.

Claim 27. Keuver discloses that the aperture is defined in the wall of the base at the second end of the base and extends toward the first end of the base.

Claim 28. Keuver discloses that the gap in the wall of the cylindrical collar extends parallel to the longitudinal axis of the collar along the length of the collar and is of a width sufficient to allow a corresponding tube to be inserted through the gap with an application of force.

Claim 29. Keuver discloses a pair of opposing wings (65) projecting from the outer surface of the collar and extending parallel to the longitudinal axis of the collar along the length of the collar.



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 and 4-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleuver (U.S. Patent 4,477,109).

Claim 1. Kleuver (figs.1-3) discloses a connecting fastener comprising a cylindrical base (16) having a central bore (central bore of 16) disposed therein, including a first end (top end of 16) and a second end (bottom end of 16) and a base wall (outer wall of 16), the base wall having a partial gap (within 16 between 49) disposed therein; at least two, inwardly projecting projections (49) extending from an inner surface of the wall into the central bore (central bore of 16) proximate the first end of the base; a cylindrical collar (14) having an central base (central portion of 14) disposed therein and a first end (top end of 14) disposed proximate the second end of the base, and a collar wall (wall of 14), the collar wall having a gap (portion of 20 within 14); and a shoulder (40) connected to and extending between the second end of the base and the first end of the collar along at least a portion of a respective circumference of the base and the collar. Kleuver discloses only three projecting projections (49) however one of ordinary skill in the art would easily recognize that duplicating the projections to be six oppositely facing projections would increase the clamping forces thus making a stronger connection. It has generally been recognized that duplicating the components of a prior art device is a design consideration within the skill of the art. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Furthermore, it has

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generally been recognized that the rearranging of parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. Accordingly, it would have been obvious to one of ordinary skill in the art to duplicate the Kleuver projections to be six oppositely facing projections, for the purpose of increasing joint strength.

Claim 4. Keuver discloses that the at least two projections extend along a portion of an inner circumference of the base.

Claim 5. Keuver discloses that the at least two projections include at least one of a ramp surface (surface receiving 55), a stopping wall (54), a retaining wall (inner face of 49) and a locking surface (surface of 54).

Claim 6. Keuver discloses the gap defined in the wall of the base that is of a sufficient width to allow a sealing surface on a tube to pass through the gap.

Claim 7. Keuver discloses that the gap defined in the wall of the base at the second end of the base extends toward the first end of the base.

Claim 8. Keuver discloses that the wall of the base further comprises ribs on its outer surface (on outer surface of 45 as described in col.3, ll.43-44).

Claim 9. Keuver discloses that an outer diameter of the collar is less than an outer diameter of the base.

Claim 10. Keuver discloses that an outer diameter (tapered lower portion of 14) of the collar is less than an inner diameter of the base.

Claim 11. Keuver discloses that the gap defined in the wall of the collar extends parallel to a longitudinal axis of the collar from the first end of the collar to the second end of the collar



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and is of a width sufficient to allow a tube to be inserted through the gap with the application of force.

Claim 12. Keuver discloses that a pair of opposing wings (65) project from the outer surface of the collar and extend (for some distance) parallel to the longitudinal axis of the collar between the first and second ends of the collar.

### ***Allowable Subject Matter***

Claims 30-38 and 46-54 are allowed.

- Claims 30-38 remain allowed for reasons stated in the previous Office Action, despite applicant's minor amendment to the claim.
- Regarding claim 46, subsection (d) of the claim contains the allowable subject matter noted for claim 30 in the previous Office Action, though worded slightly differently, and thus is similarly allowed along with claims 47-54 which depend therefrom.

### ***Response to Arguments***

Applicant's arguments with regard to the claim rejections have been fully considered but they are not persuasive.

The applicant argues that Kleuver discloses no gap. This is not persuasive since Kleuver discloses a gap between elements 49, as is detailed in the rejections above.

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***Conclusion***

Applicant's amendment (i.e., the newly added limitation "two oppositely-facing" in line 4 of claim1) necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (571) 272-7085. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

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February 16, 2006



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